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PAPERS

IN

COLONIES AND TRADE.

COLONIES AND TRADE.

The GOLD MEDAL of the Society was this Session adjudged to the Honourable JOSEPH ROBLEY, of the Island of Tobago, for Additions to his Plantation of BREAD-FRUIT TREES, mentioned in the XXth Vol. of Transactions, p. 357.

The following Accounts and Certificates were received from him.

SIR,

I HAD the honour to address you on the 25th of August, last year, on the subject of a plantation of Bread-Fruit Trees, on one of my estates in this island, requesting you to lay the

same before the President, Vice-Presidents, and members of the Society of Arts, together with the certificates and other papers relating to the cultivation of that fruit; and also samples of the fruit, conformably to the advertisement of the Society on that subject.

Having persevered in the method of cutting the suckers from the roots of the three old trees, as I have already described to you in my former letters and papers, I have increased the number of my plants to three hundred and nineteen; and I have now the honour to transmit the necessary certificates and samples of the fruit, which I request you will lay before the Society at their first meeting.

Although it appears, by the Definitive Treaty of Peace, that this colony has been ceded to France, and may probably be soon delivered up to the French Republic, I trust the Society will be of opinion, that this circumstance

stance ought not to operate with them to the disadvantage of an individual.

I have the honour to be, SIR,

Your most obedient Servant,

JOSEPH ROBLEY.

Tobago, Golden Grove.
1st July, 1802.

CHARLES TAYLOR, Esq.

SIR,

I HAD the honour to write to you on the 1st of July last, and to inclose to you certificates of my plantation of bread-fruit trees at that time, for the information of the President, Vice-Presidents, and members of the Society for the Encouragement of Arts, &c.

The weather having proved very favourable, I have been enabled to increase my quantity of plants, fifty-two in number, making in the whole three hundred and seventy-one plants; and as this island is still in the possession of Great Britain, I request you will do me

the favour to lay this letter before the Society for their information.

I have the honour to be, with great respect,

SIR,

Your most obedient Servant,

JOSEPH ROBLEY.

Tobago, Golden Grove,
Sept. 20, 1802.

To the SECRETARY of the
SOCIETY of ARTS, &c.

SIR,

I BEG leave to send you the inclosed letter and certificates, which I have received from the Honourable Joseph Robley, President of the Council, and Acting Governor of the island of Tobago. You will also receive samples of the bread fruit, variously prepared, and specimens of the leaves and small blossoms of the tree.

Viz.—No. 1. A case, containing two bottles of the bread fruit, preserved in distilled vinegar. One bottle, with a large

large bread fruit, preserved whole, nearly of its natural size; the other, with several of the bread fruit, cut in two, and preserved in like manner.

No. 2. A box, containing several specimens of the male blossom, and the leaves dried and preserved, so as to retain much of their natural appearance.

No. 3. A box, containing two specimens of the bread fruit, dried.

The care that has been taken to prepare these specimens will, I trust, prove satisfactory to the Society. The honorary medal conferred on the Honourable Joseph Robley, by the Society, last April, has not yet reached him, for want of a safe opportunity of conveying it, although he was made acquainted with the Medal being received by me.

I am, SIR, with great respect,

Your most obedient Servant,

JOHN ROBLEY.

No. 164, *Aldersgate-street,*
Oct. 18, 1802.

Mr. CHARLES TAYLOR, Secretary.

Certificates from the Governor of the Island, from Robert Paterson, Esq. Chief Justice of the Court of Common Pleas, and Speaker of the Assembly, Charles Wightmace, Esq. Member of his Majesty's Council, and Collector of his Majesty's Customs, and from George Lyall, Esq. principal manager of all the estates of the Governor, Joseph Robley, Esq. accompanied these papers, confirming the above statement, that 319 plants of the true Otaheite bread-fruit tree, are now growing in a flourishing state, and are completely fenced in and protected.

The

The Thanks of the SOCIETY were this Session presented to Mr. JOHN COWIE, of Finsbury Square, London, for the following communication on an article sent from the East Indies, under the name of Gum Kuteera, and of which a large quantity has been lately imported into this kingdom.

SIR,

THERE is a gum produced in several parts of Oude and the adjacent provinces, so nearly resembling gum tragacanth, as to have been taken for it by many; and large quantities of it, of late years, have been imported into Europe, under this mistaken opinion. But it is now well ascertained, that this gum (which in the country language is called kuteera) is the produce of a particular tree,

tree, of quite a different species from the thorny bush which yields the tragacanth; and being imperfectly soluble, and possessing but little of a glutinous nature, renders it inapplicable to the purposes for which gum tragacanth is used. I am nevertheless of opinion, that this gum might be found serviceable, in one way or other, to some of the arts and manufactures, and am therefore induced shortly to describe it, and the use to which it is applied in India, with a view of exciting any of your ingenious correspondents to make experiments on it, and determine its real value, or absolute inutility.

The kuteera is in loose wrinkled drops or pieces, void of smell and taste, of a whitish colour, and mostly transparent. In water, it slowly forms itself to a pulp or jelly, and is nearly tasteless; but, if pounded well in a mortar, and then boiled in water for fifteen minutes, stirring it all the time, it will be

be found *completely dissolved.* A tea-spoonful of this powder gives to three pints of water the consistence of capillaire. Might it not in this state be of service to painters and artificial florists, or even used to give a gloss to silks? The natives of India make a varnish by mixing kuteera with other gums; and I have been told, they likewise make use of it in the printing of calicoes. It is the principal ingredient in a medicine they give to their horses in certain diseases, and in this respect is of very general consumption.

I shall only add, that many tons of this gum are now lying in the East-India Company's warehouses, totally unsaleable, or that will not sell for more than the first cost in India; and if this notice shall be attended with beneficial consequences, I shall derive great satisfaction in the reflexion of having served the interest of the speculators in this drug, amongst whom I could

I could formerly number myself; and I believe I was the first importer of it into this country.

I am, SIR,

Your most obedient Servant,

JOHN COWIE.

Finsbury-square,
25th May, 1802.

To Mr. CHARLES TAYLOR, Sec.

The

The THANKS of the Society were this Session presented to JOHN STOCKWELL, Esq. of the East-India House, for the following Communication on the CHAY ROOT, a species of Madder used for dying durable red Colours in the East Indies.

MR. Stockwell presents his compliments to Mr. Taylor, with a sample of an article called Chaya Root, for the inspection of the Society for the Encouragement of Arts, &c. It is in much use on the Coromandel coast, for dying. He accompanies it with a short extract, which will afford some information concerning it.

If Mr. Taylor should cause any experiments to be made upon it, Mr. Stockwell will be obliged by being favoured with the result; and if any person

son should think favourably of it, and be desirous of a quantity, no doubt it may be had.

East-India Warehouses,
Crutched Friars, 23d May, 1803.

Extract from the BENGAL COMMERCIAL CONSULTATIONS, *the 24th of April,* 1798.

To W. A. EDMONSTONE, Esq. Secretary to the Board of Trade.

SIR,

I HAVE the honour to acknowledge the receipt of your letter of the 31st ult. informing me that I was desired by the Board to make some experiments with the Chay Root, and to report whether I think it will be of any use to the dyers or calico-printers at home.

It

It is rather surprising, considering the pains that have been taken in Europe to discover, or at least to imitate the method of dying the *Turkish* or *Adrianople* red, that so little attention has been paid to the equally beautiful and permanent red given to their calicoes by the natives of the coast of Coromandel. Although full accounts of the practice of calico-printing in the East Indies were sent home long ago by the missionary Cœur Doux, M. Poivre, and others, it does not appear that the European artists have ever tried their skill in the *Chay* root, the drug by which the admired red colour is produced.—I have never heard, at least, of any such attempts, nor do I believe that the root has ever been sent home. It is evident, from the manner in which this drug is mentioned by Dr. Bancroft, in his "Experimental Researches," p. 174, that well-informed writer had never seen it, which I think could scarcely

scarcely have happened, had it been at all known to the London dyers.

It is probable that the tediousness of the Indian process, as described by those who sent home the accounts of it, consisting of many tiresome manipulations, continued during a period of nineteen or twenty days, deterred the European artists from trying the effects of the *Chay* root in dying or printing their cottons. What may appear more extraordinary is, that the same cause, co-operating perhaps with the natural indolence of the people, and their having cheaper though inferior red dyes at hand, has prevented the use of this root from obtaining in Bengal; for, so far as I can learn, it is not used in this part of India. The natives here are content with the red produced by the *Aul Munjiet* and other drugs, though the colours yielded by these are far inferior to those of Madras calicoes. On this account I am surprised at the measure which has

has been adopted, of sending round hither such a large quantity of the *Chay root* from the coast. I apprehend very little or none of it will be purchased at the approaching sale, in which case it must be either returned to Madras or sent to England. The expediency of this last measure must depend on the possibility of so abridging the process of dying, or printing cottons with *Chay root*, that the English artists may find it worth their while to have recourse to it for the reds and purples, instead of the *Smyrna madder*, or whatever other drugs they use for those purposes at present.

To ascertain this point, I have, agreeably to the instructions of the Board, made several experiments with the *Chay root*; indeed as many as the shortness of the time, and my other avocations would permit. From the result of these trials, I entertain great hopes that the English calico-printers will not only shorten the process, so

much as to finish it within a tenth part of the time required for the Indian process, but that they will by the *Chay root* dye their cottons of a brighter red than can be done by madder, or any other vegetable.

It is needless to detail the many trials I made, which either failed altogether, or succeeded in a very imperfect degree. I shall therefore only mention that process which I found to answer best, and by which the piece of cotton cloth, which I herewith send you for the inspection of the Board, was printed. Having made a decoction of two ounces of powdered *Hurr*, (the fruit of the Myrobolona Citrona*) in a quart of water, I took a piece of Madras cotton cloth, and boiled it in the decoction for about half an hour. Having taken out the cloth, and washed it well with cold water, I dried it in the

* Aleppo galls will probably answer as well as the Hurr.

the sun, and afterwards had it properly ironed and smoothed for the pencil. I then took some of the acetite of alumine, made in the manner directed by Dr. Bancroft, and, thickening it properly with gum-arabic, I delineated a flower with this mordant upon the cloth, and dried it in the sun. I afterwards washed the cloth in cold water, to clear it of the superfluous acetite, and dried it again in the sun. I then infused about two ounces of the *Chay root*, coarsely powdered, with about a quart of water, in a vessel well tinned, and setting it on the fire, as soon as the liquor began to grow warm, I put the cloth into it, and let it remain until it had boiled about half an hour, during which the cloth was frequently stirred. I then took it out, and having rinced it well with cold water, I put it to dry in the sun. The delineation of the flower now appeared of a good bright red, and the ground of the cloth, though slightly tinged, was much less

so than I expected. By washing it again with cold water, and afterwards with soap and water, and exposing it for a whole day to the sun, during which it was frequently besprinkled with water, I brought it to the state in which you now see it. The whole process has only taken up about six and thirty hours. I should have mentioned that the washing with soap heightened the brightness of the red considerably.

Making allowance for my want of experience in the practice of dying, and considering the great improvement which may be expected in the process from the superior skill of the English artists, I think we may conclude, even from this imperfect essay, that the *Chay root* will be a valuable acquisition to the English calico-printers. I therefore recommend, that so much of the root as may remain unpurchased at the sale, or at least that a part of it, may

may be properly packed up and sent to England by one of the ships now under dispatch.

This drug is the root of a plant called by the botanists *Oldenlandia Umbellata*. I have not met with it in this part of India; but it grows naturally on the coast of Coromandel, where it is also cultivated in great abundance, for the use of the dyers and calico-printers.

The sample which you sent me appears to be of a good quality, and in good condition. It is said that the root will remain with its virtues entire for several years, and that they are even improved by keeping. If this be the case, and provided the dyers at home find it answer, this circumstance is a very favourable one, and must enhance the value of the drug as an article of commerce. I am, &c.

(Signed) J. FLEMING,
Inspector of Drugs.

Export Warehouse,
6th April, 1798.

Minute of the BOARD *of* TRADE, *dated April* 10, 1798.

THE Board are of opinion, that the result of the Inspector's experiments will afford very acceptable information to the calico-printers in England; and, if their operations should prove his ideas to be well founded, the plant may prove a valuable acquisition to the manufacturers of Great Britain, and also an article of commerce from the coast particularly useful, as there is a want of coast articles of low value, as well light, as a sufficiency of ponderous, to make up a proper cargo for a large ship, without swelling its value to too great a risk, as would be the case were a ship to be loaded entirely with piece goods.

The

The Thanks of the SOCIETY were this Session voted to Dr. ANDERSON, of St. Vincent, for the following communication, relative to the state of the Royal Botanical Garden in that Island, and his endeavours to extend its products.

SIR,

FROM Trinidad I took the liberty of addressing a few lines to you, mentioning my being there on a botanical excursion; and, having omitted to inform the Society, previous to my departure, of my good fortune in obtaining two nutmeg plants from Cayenne, with some others, I had the pleasure, on my arrival at this place, of receiving your letter of May, informing me of the intended honour of a medal for me from the Society. Of this honour I am fully sensible; and the Society may

rest assured that my constant endeavours will be to merit it, and by every means in my power to forward their intentions.

For the information of the Society, I inclose a list of some useful articles introduced into the garden since I had the honour of addressing them on the subject, of the most valuable plants in it.

As the true nutmeg has long been a grand desideratum, after being well informed it was at Cayenne, I lost no time, after the cessation of hostilities, in endeavouring to obtain it. A good opportunity soon offered, by a gentleman from this island going there, on his own private business, who has always been anxious to serve me. Under his care I sent some boxes, with such plants as I conceived were not there, and desired him to deliver them as from this garden. This commission he fully executed, and in return brought me two fine young nutmeg

nutmeg plants, and several of the true black pepper, with some others, as I have specified, from Cayenne, in the inclosed list. These were accompanied with a very polite letter from the Governor, Victor Hugues, and a list of several East-India plants, of which he is in want, and which, unluckily, the garden does not yet possess.

I mentioned to you, I think, from Trinidad, that Governor Picton was anxious to establish a garden there on a large plan. Whether that can be accomplished or not, is beyond my sphere of knowledge. The situation is well adapted for such an institution, not only for investigating the many useful and curious plants of that colony, but also for introducing those of South America.

Through Governor Picton's friendship and assistance, I was enabled to bring a great number of boxes filled with living plants to the garden. Many

of

of them were rare and curious, and several of them useful. He attached the Government schooner to my command for two weeks, along the Gulf of Paria.

The natural site of this garden being on a declivity, with scarcely any level surface, most of the soil is washed off. It is with difficulty that young plants, particularly seedlings, can now be reared in it. Many of the oldest trees are dying; but, adjoining to it, is what is commonly called the Barrack-land, in the possession of Government. A part of this, and that the most adjacent, is very level, and consequently would be a valuable acquisition to the garden. The Governor says it will be added to it.

I am, with great regard,

SIR,

Your most obedient Servant,

ALEXANDER ANDERSON.

Botanic Garden, St. Vincent,
July 28, 1802.

CHARLES TAYLOR, Esq.

Useful

USEFUL PLANTS *introduced into his Majesty's* BOTANICAL GARDEN, *in the Island of* ST. VINCENT, *from the 24th of December*, 1801, *to the 24th of June*, 1802.

Aucuba Japonica - - -	from England.
Calamus rapha (palm) - - -	from Cayenne.
Camellia Japonica - - -	from England.
Couma Guianensis, *Aublet* (fruit) -	from Cayenne.
Gomuter (East-India palm) - -	from Board of Agriculture.
Mimosa Catechu (Terra Japonica) -	from Sir J. Banks.
Myristica Officinalis, or True Nutmeg Tree	two young plants (flourishing) from Cayenne.
Paripou Palm (fruit esculent) - -	from Cayenne.
Parivoa Tomentosa (Dimorpha Tomentosa), *Aublet* - - -	from Cayenne.
Phaseolus Mungo - - -	from Dominica.
Phormium Tenax (New Zealand Flea Plant) - - - -	from England.
Piper Nigrum Vera (six plants) -	from Cayenne.
—— Cubeba - - - - -	from Trinidad.
Pistacia Terebinthus - - -	from England.
Robinia Nicon, *Aublet* - - -	from Cayenne.
Symphonia Globulifera. - -	from Trinidad.

ALEX. ANDERSON,
Superintendant.

On

On the Culture of Hemp in Canada.

THE support of our Navy will be regarded by every friend to this United Empire as an object of the first magnitude. The procuring for it a full supply of hemp is necessary to its existence. It is a fact, that the hemp imported into Great Britain is, at its present price, upon an average of eight years past, in value, annually, above 1,500,000*l.* sterling, and that the principal part of that sum is paid to Russia.

The Society of Arts, &c. have naturally directed their views to this important subject, and, desirous to give encouragement to the production of hemp from our own colonies, offered, in the year 1801, considerable premiums for its cultivation in Canada. The following letters are selected for publication from various others which the

the Society have received upon the business, in order to show to the public the measures which have been already pursued or recommended. They announce with satisfaction, that they have notice of several claims to be made upon them from Canada, in the next session, for the culture of this valuable article. The Society have attended to the hints received from their several correspondents; and they hope that Government will give such farther support to their endeavours in this line, as will ensure complete success.

SIR,

I HAVE the pleasure to lay before you the inclosed letter from my particular and very worthy friend, Robert Hamilton, Esq. and to assure you that, independent of my being a subscriber to the Society of Arts, I shall very cheerfully forward any communications

cations you may have to make to Mr. Hamilton. Feeling as I do, from important commercial connexions with the provinces of Canada, a lively interest in their prosperity, and wishing at the same time to see the laudable efforts of the Society properly applied, I cannot forbear to urge to your consideration all that Mr. Hamilton has said on the culture of hemp in that country, in which I am convinced he is perfectly right, as the Society may be, that he is a man of too high a sense of honour to deceive them.

I have the honour to be,

SIR,

Your most obedient Servant,

JOHN BRICKWOOD.

Billiter-square,
9th June, 1802.

CHARLES TAYLOR, Esq.

SIR,

SIR,

HAVING had the honour to receive some of the advertisements of the Society for the Encouragement of Arts, &c. for the purpose of making known the premiums they offer to the Cultivators of hemp in this Province, I think it my duty, through you, to state to them the reasons why, in all probability, no applications will be made this season for the proffered bounties.

The advertisements dated in April, 1801, only reached this Country in August, totally precluding the possibility of doing any thing in that season. The country was then wholly destitute of hemp-seed, and but little could be procured, at a shorter distance than some hundred miles.

The inclosed portion of a newspaper will show the steps taken by the Legislature

lature at their last meeting, in appropriating money for the purchase of seed. Difficulties have occurred in the procuring of this, which were not then foreseen; and I have reason to fear that only a very small quantity will be received in time to sow in the ensuing spring. One of the newspaper publications now inclosed shows this to be the sentiments also of an Agricultural Society established in the vicinity of this place, with the means they recommend, to render the small supply of seed that may be procured as effectual as possible.

Should therefore no application be made to the Society in the ensuing season, may I entreat that they will attribute it to the above-mentioned cause, and not to any neglect of, or disrespect for, the very liberal bounty they hold out. And may I hope that these will be continued for some years to come.

Should

Should we in this be so far indulged by the Society, might I presume to suggest an alteration in the prescribed terms, which a local knowledge the Society cannot possibly possess enables me to point out as necessary.

In a new country, so lately cleared of large trees, the stumps and roots abound in such numbers, and have as yet such strength, as entirely to preclude the use of the drill plough, of which there is not one in the province. Indeed from these stubborn obstacles, we are prevented from sowing almost any seeds in regular rows.

Perhaps a bounty granted on the greatest quantity of good hemp, raised and brought to market by any individual, and also for the greatest quantity of good seed, provided both were carried to a certain extent, might be the most effectual mode of encouraging this useful culture in this new country.

Being a stranger to the rules of the Society, I know not but I may be guilty of impropriety in thus addressing them through you. If such correspondence be allowed, I should esteem myself honoured in receiving their commands, and happy if I could at any time communicate any information from this distant quarter to so respectable a body.

I am, SIR,

Your most obedient Servant,

R. HAMILTON.

Queenston, Upper Canada,
Feb. 4, 1803.

CHARLES TAYLOR, Esq.

SIR,

SIR,

IN the course of last year I had occasion to make experiments, with some other persons, on the growth of hemp. Samples have been sent by our Governor, Sir Robert Shore Milnes, Bart. to Evan Nepean, Esq. for the inspection of the Lords Commissioners of the Admiralty. I gave samples also to Capt. Digby, of the Navy, when he was here last autumn, and to Lieut. Col. Doyle, who presented them to Sir Andrew Hammond, &c. — To Commissioner Schank, of the Transport Board, I also sent samples; who, through the Duke of Northumberland, presented them to the Society of Arts, &c. From the letters and information received, I have reason to conclude the hemp was not disapproved of. That this country, throughout, is fit for the cultivation of hemp, is ascertained beyond a doubt. We have nothing against us but our prejudices,

the high price obtained for wheat and grain, and our scanty population; which latter renders labour excessively dear. The principle you have introduced, "that it is sound policy to make temporary sacrifices to obtain to Britain the ultimate advantage of supplying herself, from her own territories, with hemp," is true beyond a doubt. Government, I presume, sees the business in that point of view. Sir Robert Shore Milnes has taken it up very warmly; and his example, for he is become a cultivator, has induced others to try what may be done. He has lately instituted Boards or Committees here, and at Montreal, at which he personally presides when convenient, and has done me the honour to desire me, in his absence, to take the chair of the Quebec Committee. In that capacity, it became necessary to publish something, to instruct the Canadians on the cultivation, rotting, and breaking of hemp. That publi-

publication, short and imperfect as it is, I take the liberty of inclosing to you, in the hope you will correct and amend it, and point out what, more or less, may be requisite to effect the end desired. We have not any hemp mills in Canada, nor do I think them necessary at the outset. The hand-break, or peeling of the bark from the stalk or reed, seems the best adapted to our local and present state of farming and farmers. The Legislature of the province, at the Governor's recommendation, have taken up the business, and voted a sum of £.1200, which is considerable for our finance, for the encouragement of the culture of hemp. Part of this small sum is invested in the procuring of seed, from the neighbouring American States, which is at this present time distributed *gratis* to experimentalists, and the remainder will go to paying them for the clean hemp and seed they deliver, in

due time, to the Secretaries of the Boards.

This small fund will not admit of so liberal a price as it is thought our farmers must have, to induce them at first to grow hemp. The hemp, when prepared by the cultivator, in the simplest manner it can be exported, should be taken in small or or great quantities (pounds, hundred weights, or tons); and he should be paid in ready cash. The more liberal the price, and the less difficulty as to quality at the outset, the fairer the prospect of general growth. I am decidedly of opinion, that whatever premium or bounty is held out by individuals, by societies, or by Government, should be offered on the pound, hundred weight, or ton, without limitation of quantity, and without making modes of culture or quality of soil, essential to obtain the premium proposed. A few hand-

breaks

breaks, hackles, and swingles, should be sent out; and if a few English or foreign farmers, well versed in the cultivation of hemp, could be procured, they would perfect us by their superior skill.

We shall this year, I trust, raise seed enough for ourselves; if not, we can have, I think, a supply in proportion to our wants, from the American States, with whom at all seasons we have intercourse by inland navigation and carriage. In the culture, we must apply foreign practice and theory to our local situation, adapting the business to our population and climate. The modes practised by the boors of Livonia and Russia, would probably be the best guides for us, equally bound up, as we are, with seven months frost and snow in the twelve.

It will be some years before cargoes of hemp are exported from Canada, notwithstanding all our efforts.

Permit me to ask you, whether the difference of colour in hemp is essential, admitting the strength to be equal? and also the difference of value of that stripped from the reed by hand to that broken with a hand-break or mill?

On the whole, whatever information it may please you to give, will be gratefully acknowledged by,

SIR,

Your most obedient Servant,

WILLIAM GRANT.

P. S. If you honour me with a letter, it will come safely to hand, by the ordinary packets to Halifax or New-York; or by private ships, directly to Quebec, or by sending to Messrs. Brickwood's and Daniell's counting-house, in Billiter-square, London.

Quebec, May 26, 1802.

CHARLES TAYLOR, Esq.

SIR,

SIR,

AFTER the short conversation you favoured me with some days ago, respecting the culture of hemp, and the introduction thereof into the provinces of Upper and Lower Canada, I have seriously considered that interesting subject, and have committed a few of my ideas thereon to paper, which I now take the liberty to offer for your perusal, that they may be communicated to the Society for the Encouragement of Arts, &c. if they should, in your opinion, contain any thing worthy the notice of that respectable body.

I have the honour to be,

SIR,

Your most obedient Servant,

WILLIAM VONDENBELDEN,
of Quebec.

London, March 29, 1803.

To CHARLES TAYLOR, Esq.

THAT

THAT the introduction of the culture of hemp into British America must in time become highly advantageous both to Great Britain and her American Colonies, admits of no doubt; and it is equally certain, that, in point of extent as well as fertility of soil and benignity of climate, the two Canadas are, by themselves, fully adequate to supply this Island with a commodity so necessary to its commercial existence, and for which it now precariously depends on foreign markets.

The introduction, however, of that useful plant with success, into those countries will meet, especially in Lower Canada, with some impediments and oppositions, which, although they may by proper measures and perseverance be removed and defeated, yet will retard the attainment of that desirable object. The Canadians are uncommonly attached to their old methods of sowing and tilling, and reluctantly deviate from their usual agricultural

tural pursuits. That foible, it would seem, might be easily overcome; but unfortunately some classes of men, who have severally great influence among the country people, are directly interested in encouraging the cultivation of wheat preferably to that commodity. The Roman Catholic Clergy depend, for their tithes, and consequently for the means of their subsistence—the Wheat Merchants, for success in trade—and the Seigneurs, for the employ of their mills, the chief source of their revenue—on abundant crops of wheat and other grain.

The scarcity of working hands, and consequent high price of labour, is another, and perhaps more serious obstacle to the introduction of the cultivation of hemp into the Canadas: that, however, is an inconvenience incident to all new countries, and time alone can remove it. It has been observed, that the number of settlers in the said colonies,

nies, probably owing to the benign influence of the new Constitution given them by act of Parliament in 1791, and the granting of the waste lands of the Crown, has of late rapidly increased by a numerous ingress of emigrants from Scotland and the United States. At the epocha of the conquest, in 1763, there were scarcely forty thousand inhabitants in Canada. In 1783, a census was taken, by order of General Haldimand, when it was found they had augmented to one hundred thousand; and at this time their number is computed, in Lower Canada, at two hundred thousand, and at thirty-five thousand in the Upper Province.

It is probable that, in those parts of Lower Canada where the transport of grain to the port of Quebec, the ultimate emporium for the whole country of all produce for exportation, is facilitated by the River St. Lawrence, the settlers

settlers will be more backward in sowing hemp than in the Southern townships, which are remote from all water communication, on account of the expense and difficulties land-carriage is in general attended with. One ton weight of hemp being worth at least five times as much as the same weight of grain, supposing them both of the best quality, those distant settlers will of course give the preference to cultivating the former commodity. That observation is in a stronger degree applicable to the Upper Province, where the rapids of the River St. Lawrence (or Calaracquoni), immediately above Montreal, subject the inhabitants to immense expense, in bringing their produce to the Quebec market.

The Executive Government of Lower Canada have latterly taken great pains to introduce the cultivation of hemp; and the House of Assembly have seconded their views, by voting certain sums

sums for its encouragement. The Hemp Society, recently established under the immediate patronage of his Excellency Lieutenant-Governor Milnes, are now very laudably employed in co-operating in this design, by procuring good seed, distributing it to persons who are disposed to make a proper use of it, by publishing through the medium of the press all useful information, and by various other means. These joint efforts, it is to be hoped, will, at least in a considerable degree, produce the desired effect. But one measure has not yet been tried, which, I am inclined to think, would prove more efficacious than any other hitherto employed. In countries like Lower Canada, where few of the farmers can read, printed instructions are of no avail. In order effectually to teach the Canadians the whole process of cultivating hemp, and to prepare it in high perfection, both for the rope-yard and

and the spinning-wheel, a few trusty farmers, thoroughly possessed of that knowledge, should, for a limited time, be sent to that country: they should be placed at proper distances, on suitable farms, there to cultivate hemp and prepare for the market, not only their own crops, but also such as, in its raw state, might be offered for sale by settlers, who, for want of knowledge, have been unable to turn it to any use. By these means the farmers would have opportunities of perfecting themselves in this branch of agriculture, and at the same time would not lose the fruits of their labour, by keeping their raw hemp useless on their hands—a disappointment which must of course, at the very outset, give (and I may add, has actually given) a serious check to their industry, and disgust them with making further experiments.

If,

If, in addition to these several encouragements, the British Government were also, for a limited time, to take at liberal prices, according to quality, the hemp so raised, considerable quantities, I conceive, would shortly be produced in the said Colonies.

REWARDS